

Work Order ID 148136

June 27, 2016 11:11:20 AM

148136

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Item ID: D3152-3	Accept	*N900040100*	Setup	Start	*NS1*
Revision ID:				Stop	*NS2*
Item Name: Seal					
Start Date: 6/27/2016	Start Qty: 5.00	*5*	Cust Item ID:		
Required Date: 7/8/2016	Req'd Qty: 5.00	*5*	Customer:		
Reference:					

Approvals:	Process Plan: <u>SH</u>	Date: <u>6/27/16</u>	Tooling:	Date:	Run	Start	*NR1*
	QC:	Date:	SPC (Y/N):	Date:		Stop	*NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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Draw Nbr	Revision Nbr
D3152	C

110		0.00							DAS 07 9-89
110						17			16/10/24
Thermoform	Memo	0.00							
Thermoforming Machine	1- FABRICATE AS PER DWG USING TOOL DT10106 BY INJECTING SILICONE CASTING RESIN M-SILCC-65A (MCMaster CARR P/N:8595K77) BATCH: <u>4135071</u> INSERT MOLD IN PRESSURE POT.								

120	QC2- Inspect parts off machine FAI/FAIB	0.00							
120									
QC	Memo	0.01							
Quality Control	<u>N/A</u> <u>QB</u>								

DQA: _____ Date: _____

**WORK ORDER NON-CONFORMANCE / UPDATE**

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: <u>148136</u> Part No. <u>03152-3</u> NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☒ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS					
				Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐		
				Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐		
				Thermoforming ☒	Finishing ☐	Rec/Store/Packaging ☐	Other ☐		
				Large Fab ☐	Composite ☐	Supplier ☐			
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval		
Description Work Order Deviation				Disposition					
<i>INCREASE Quantity to use up material prior to expiration date.</i> <i>N/A Sh</i>				<i>Quantity of 17 sets</i> <i>N/A Sh</i>					
				Completed By					
				Lead hand / Supervisor Approval Verification					
				QC / QA Coordinator Approval					
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐								
Misidentified ☐	Past Due ☐	OTHER :							

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Item ID: D3152-3	Accept	*N900040100*	Setup	Start	*NS1*
Revision ID:				Stop	*NS2*
Item Name: Seal					
Start Date: 6/27/2016	Start Qty: 5.00	*5*	Cust Item ID:		
Required Date: 7/8/2016	Req'd Qty: 5.00	*5*	Customer:		
Reference:					

Approvals:	Process Plan: _____	Date: _____	Tooling: _____	Date: _____	Run	Start	*NR1*
	QC: _____	Date: _____	SPC (Y/N): _____	Date: _____		Stop	*NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130	QC8- Inspect parts - second check	0.00							
130						17			DAS 38 9-89
QC	Memo	0.02							NOV 03 2016
Quality Control									
140	Identify as per dwg & Stock Location: _____	0.00							
140						17			DAS 6 9-89
Packaging	Memo	0.01							NOV 07 2016
Packaging	Location : CA2								
150	QC21- Final Inspection - Work Order Release	0.00							
150									DAS 21 9-89
QC	Memo	0.08							NOV 11 2016
Quality Control									

16-11-7

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date : _____	Step #: _____	QTY Effective : _____		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition		Completed By	
31 2017 2017				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : _____					

Picklist Print

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Page 1

Work Order ID: 148136

Parent Item: D3152-3

Parent Item Name: Seal

148136

D3152-3

Start Date: 6/27/2016

Required Date: 7/8/2016

Start Qty: 5.00

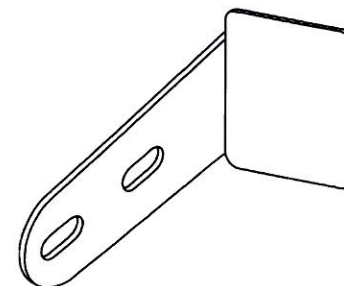
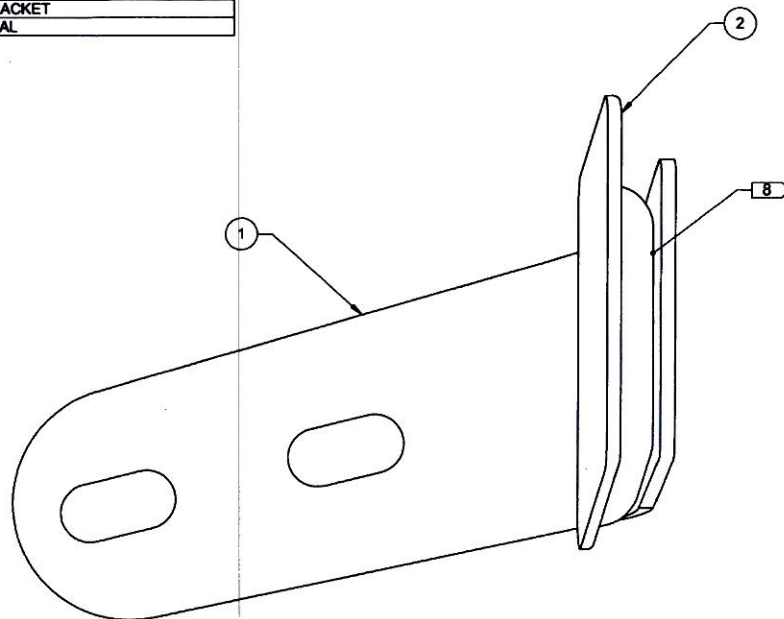
Required Qty: 5.00

Comments: IPP REV:A 15.01.29 NEW ISSUE DD VERF:JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
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No

ITEM	QTY -041	P/N	DESCRIPTION
	X	D3152-041	BRACKET ASSY
1	1	D3152-1	BRACKET
2	1	D3152-3	SEAL



D3152-041 BRACKET ASSEMBLY

NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY PER QSI 044 6.1
- 7) WEIGHT: 0.04 lbs
- 8) BOND D3152-3 SEAL TO D3152-1 BRACKET USING RTV 732 CLEAR (A/R) OR RTV 732 BLACK (A/R)

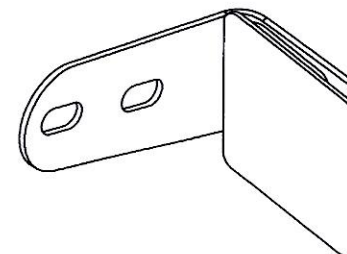
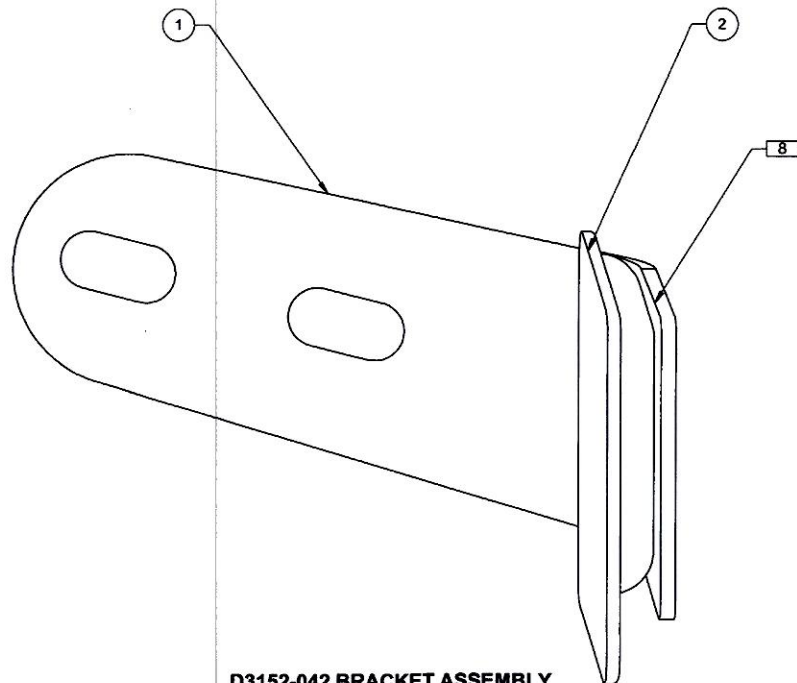
RELEASED

2015 FEB 13
ECN 14-63 4

C	REVISE D3152-3/4 (MATERIAL), RE-FORMAT DRAWING, RE-DIMENSION D3152-1F	DB	14.10.28
B	ADD PART MARKING & RTV 732 BLACK	RF	04.10.18
A	NEW ISSUE	HS	02.04.24
REV.	DESCRIPTION	BY	DATE
DESIGN	DB	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	DB		
CHECKED	AP	DRAWING NO.	REV. C
MFG. APPR.	JLM	D3152	SHEET 1 OF 5
APPROVED	HS	TITLE	SCALE
DE APPR.	DS	BRACKET ASSEMBLY	NTS
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APPROVED

ITEM	QTY -042	P/N	DESCRIPTION
	X	D3152-042	BRACKET ASSY
1	1	D3152-2	BRACKET
2	1	D3152-4	SEAL



D3152-042 BRACKET ASSEMBLY

RELEASED

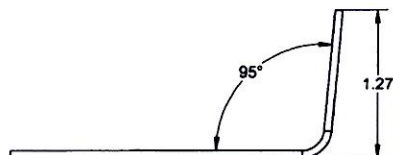
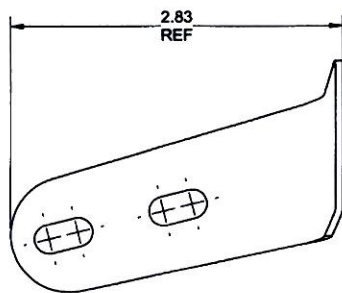
2015 FEB 13 *qr*

NOTES:

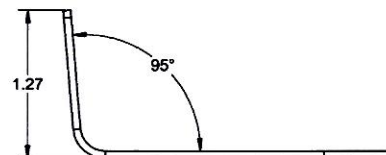
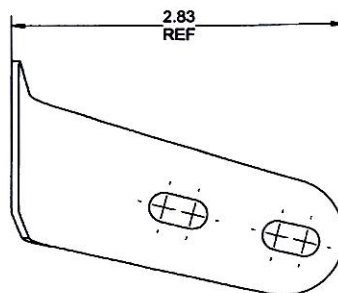
- 1) MATERIAL: N/A
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY PER QSI 044 6.1
- 7) WEIGHT: 0.04 lbs
- 8) BOND D3152-4 SEAL TO D3152-2 BRACKET USING RTV 732 CLEAR (A/R) OR RTV 732 BLACK (A/R)

APPROVED

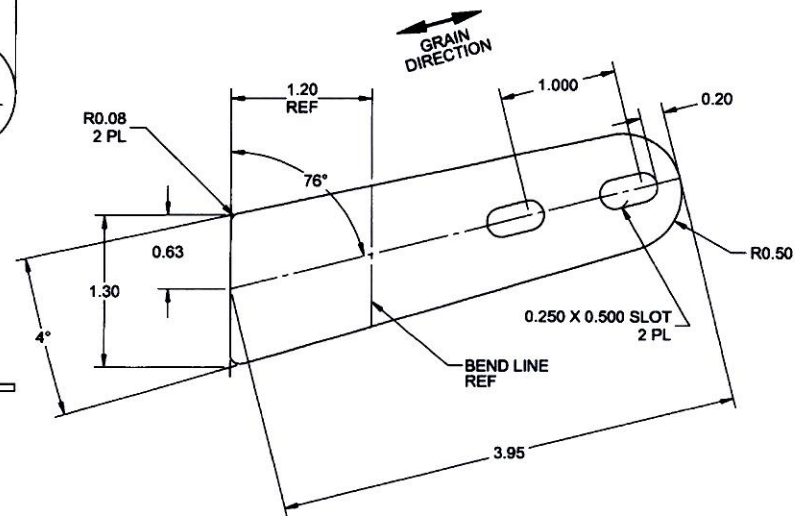
DESIGN	DB	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	DB		
CHECKED	AP	DRAWING NO.	REV. C
MFG. APPR.	JLM	D3152	SHEET 2 OF 5
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D3152-1 BRACKET
(MAKE FROM D3152-1F)
(REPLACES PREMIER P/N B30-23000-223)



D3152-2 BRACKET
(MAKE FROM D3152-1F)
(REPLACES PREMIER P/N B30-23000-224)



D3152-1F BRACKET
(FLAT PATTERN)

RELEASED

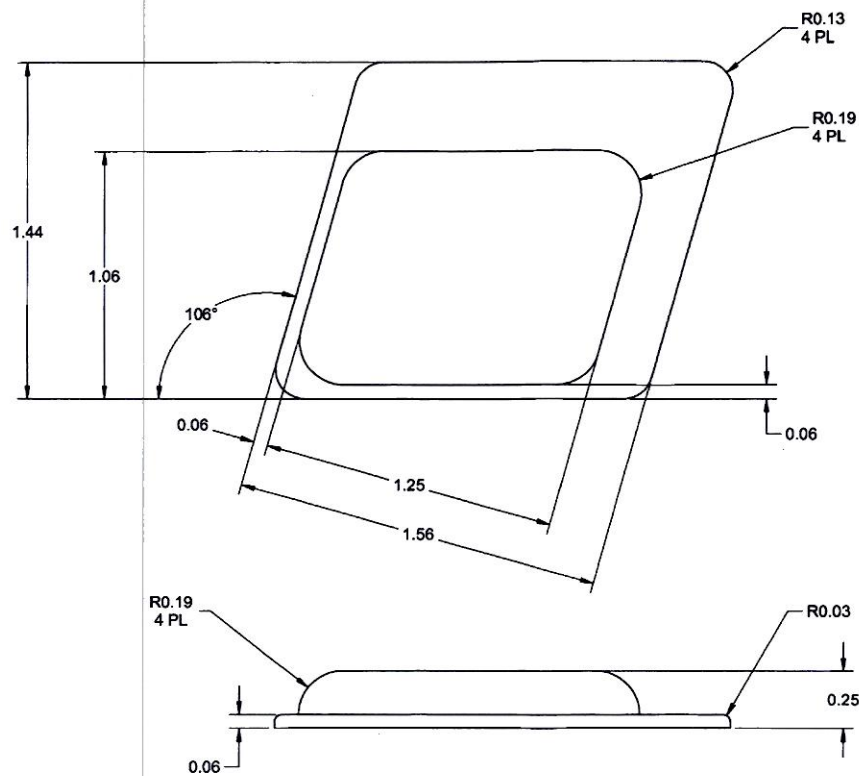
2015 FEB 13 *q*

NOTES:

- 1) MATERIAL: D3152-1F: 2024-T3 ALUMINIUM SHEET PER QQ-A-250/4 OR AMS-QQ-A-250/4
OR AMS 4037 OR ASTM B209 PER DART SPEC M2024T3S.063
- 2) FINISH: D3152-1/-2: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
POWDER COAT GREY SANDTEX (4.3.5.6) PER DART QSI 005 4.3
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: 0.03 lbs

APPROVED

DESIGN	DB	DART AEROSPACE LTD	
DRAWN	DB	HAWKESBURY, ONTARIO, CANADA	
CHECKED	AP	DRAWING NO.	REV. C
MFG. APPR.	JLM	D3152	SHEET 3 OF 5
APPROVED	HS	TITLE	SCALE
DE APPR.	DS	BRACKET ASSEMBLY	NTS
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D3152-3 SEAL
(REPLACES PREMIER P/N B30-23000-243)

RELEASED

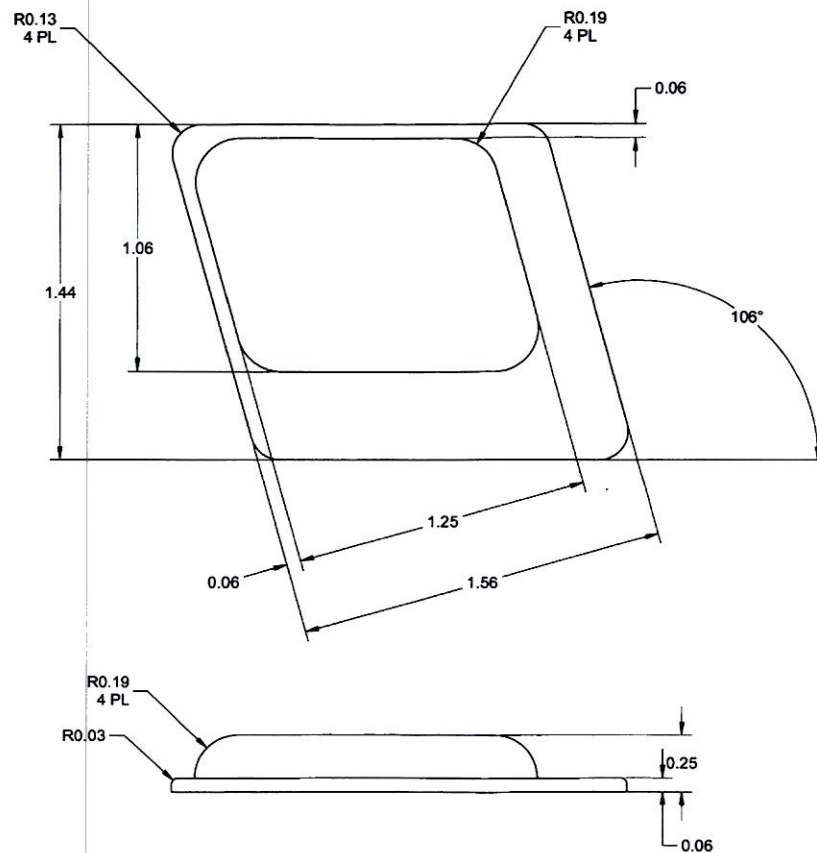
2015 FEB 13 *JP*

NOTES:

- 1) MATERIAL: M-SILCC-65A (2 PART SILICONE CASTING RESIN, SHORE 65A)
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY PER QSI 044 6.7
- 7) WEIGHT: 0.02 lbs
- 8) MAKE PARTS USING TOOL # DT10106 AND QSI 006 SECTION 4.18

APPROVED

DESIGN	DB	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	DB		
CHECKED	AP	DRAWING NO.	REV. C
MFG. APPR.	JLM	D3152	SHEET 4 OF 5
APPROVED	HS	TITLE	SCALE
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D3152-4 SEAL
(REPLACES PREMIER P/N B30-23000-244)

RELEASED

2015 FEB 13

NOTES:

- 1) MATERIAL: M-SILCC-65A (2 PART SILICONE CASTING RESIN, SHORE 65A)
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY PER QSI 044 6.7
- 7) WEIGHT: 0.02 lbs
- 8) MAKE PARTS USING TOOL # DT10106 AND QSI 006 SECTION 4.18

APPROVED

DESIGN	DB	DART AEROSPACE LTD	
DRAWN	DB	HAWKESBURY, ONTARIO, CANADA	
CHECKED	AP	DRAWING NO.	REV. C
MFG. APPR.	JLM	D3152	SHEET 5 OF 5
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